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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,517	02/23/2004	Paul A. Hosier	D/A1102D	1490

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Patent Documentation Center
Xerox Corporation
Xerox Square 20th Floor
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Rochester, NY 14644

EXAMINER

AU, BAC H

ART UNIT	PAPER NUMBER
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2822

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,517

Applicant(s)

HOSIER ET AL.

Examiner

Bac H. Au

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment dated November 9, 2005 in which claims 1, 5, and 6 were amended, and claims 3, 4, and 7 were cancelled has been entered.

Claim Objections

2. Objection of claim 7 under 37 CFR 1.75 as being a substantial duplicate is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosier (U.S. Pat. 5696626) in view of Ohtagaki (U.S. Pat. 5534443).

Regarding claims 1, 2, 5, and 6, Hosier discloses a method of making photosensitive chips for use in an imaging apparatus, comprising:

providing an integrated circuit wafer, the wafer comprising a first chip area defined in a main surface of the wafer [Col.1, lines 24-27], the first chip area including

structure related to a first photosite [14 of Fig.1], and a groove defined in the wafer, the groove defining at least one edge of the first chip area [32 of Fig.4A];

providing a filtering layer [22 of Fig. 3A], the filtering layer extending over the first photosite [14 of Fig. 3A] and over the groove [Col.4, lines 2-30]; and

dicing the wafer along the groove [40 of Fig.4A];

the filtering layer comprising acrylic [Col.1, lines 14-19];

further comprising providing in the chip area a ridge defined on the main surface between the photosite and the groove [20 of Fig. 4B].

Hosier fails to disclose a method wherein

providing a light-transmissive planar layer over the main surface, the planar layer forming a planar surface substantially parallel with the main surface, the planar layer extending over the groove;

the filtering layer disposed over the planar layer; and

the planar layer comprising acrylic.

However, Ohtagaki [2a of Fig.1a; col.6, lines 12-16] discloses "A transparent planarization resin layer 2a of acrylic resin is formed on a semiconductor substrate...";

[4,5,6 of Fig.1d; col.6, lines 1-6] discloses filtering layers disposed over the planar layer.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings of Ohtagaki into the method of Hosier to include providing a light-transmissive planar layer over the main surface, the planar layer forming a planar surface substantially parallel with the main surface, the planar layer extending over the groove; the filtering layer disposed over the planar layer; and the planar layer comprising acrylic. The ordinary artisan would have been motivated to modify Hosier in the manner set forth above for at least the purpose of providing a smooth, flat surface, on which the filtering layer can be evenly formed, for obtaining desirable spectral characteristics [Ohtagaki, col.1, lines 43-47].

Response to Arguments

4. The application relates to a method for making photosensitive chips for use in an imaging apparatus. The references also teach the manufacturing of photoelectric chips for use in imaging.

Ohtagaki, admittedly, does not expressly state that the planarization layer extends beyond the active regions shown in figures 1a-f. However, applicant's assertion that the planarization layer therefore does not so extend is without merit. For example, Ohtagaki teaches that the planarization layer is formed "on a wafer" (col. 5, line 25). Ohtagaki also teaches that the shading layer, which lies above the planarization layer, may be applied using "a spincoat method" (col. 9, lines 24-27). Because a spincoat process forms a layer over an entire wafer, including dicing grooves, and because the purpose of the planarization layer is to ensure the shading

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layer is formed evenly (col. 1, lines 43-47), the planarization layer *must* also be formed over the entire surface of the wafer, including dicing regions. Furthermore, nowhere does Ohtagaki state that the planarization layer is formed *only* over the active regions, or that it is selectively removed, as applicant asserts. Finally, that Ohtagaki doesn't teach that the *purpose* of the planarization layer is to maintain the integrity of the filter layer is without consequence. As long as a motivation exists to combine the references, the rejection is proper, regardless that the motivation is not that contemplated by the applicant. In all, the arguments are not persuasive.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bac H. Au whose telephone number is 571-272-8795.

The examiner can normally be reached on Mon-Fri 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BHA


GEORGE ECKERT
PRIMARY EXAMINER